Medical Directions

WRITTEN FOR

GOVERNOR WINTHROP

BY

ED: STAFFORD, OF LONDON,

In 1643.

WITH NOTES, BY O. W. HOLMES, M.D.

REPRINTED FROM THE

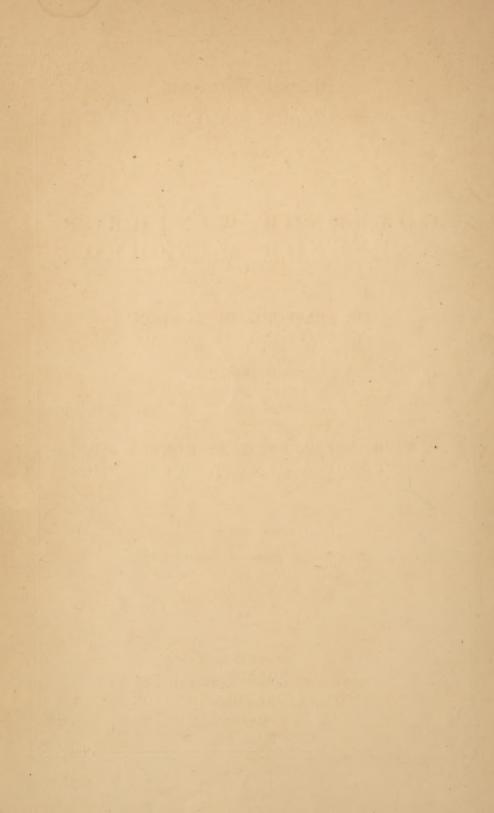
Proceedings of the Massachusetts Distorical Society.

BOSTON:

PRINTED BY JOHN WILSON AND SON, 22, SCHOOL STREET.







Medical Directions

WRITTEN FOR

GOVERNOR WINTHROP

BY

ED: STAFFORD, OF LONDON,

In 1643.

WITH NOTES, BY O. W. HOLMES, M.D.

REPRINTED FROM THE

Proceedings of the Massachusetts Fistorical Society.

BOSTON:

PRINTED BY JOHN WILSON AND SON, 22, School Street.

1862.



MEDICAL DIRECTIONS.

The Property of the Habener Science the Switch the State of the State

special distance activity of the

A direct of it overweet about a mind, which is a factor of it of the control of t

Helicani to the season belong to the season of the season

MEDICAL DIRECTIONS.

The President of the Historical Society, the Hon. Robert C. Winthrop, sent me the following paper a few weeks since, which he proposed to me "as the theme of a little contribution to the Society."—"It is," he says in his note, "the original of a collection of recipes, in 1643, by some London physician, prepared for the benefit of Governor Winthrop here in New England. I have recently discovered it among some old papers."

For my worthy friend Mr Wintrop.

[1] For Madnesse: Take ye herbe Hypericon (: in English St John's Wort) and boile it in Water or drinke, untill it be strong of it, and redd in colour: or else, putt a bundle of it in new drinke to Worke, and give it ye patient to drinke, permitting him to drinke nothing else. First purge him well with 2 or 3 seeds (: or more, according to ye strength of the partie:) of Spurge. Let them not eat much, but keepe dyet, and you shall see Wondrous effects in fewe dayes. I have knowne it to cure perfectly to admiration in five dayes.

[2] For ye Falling Sicknesse Purge first with ye Extract of Hellebore (: black hellebore I meane:) and in stead of St Johns Wort, use pentaphÿllon, (or meadow Cinquefoile:) use it as aboue is said of St Johns Wort, & God Willing he shall be perfectly cured in short or longer tyme, according as the disease hath taken roote.

- [3] For ye Mother. Give ye patient as much as will goe upon 6 pens, or a shilling, each morning, of ye powder of ye great Bryonie roote.
- [4] For Implicat or mixt diseases, as Lethargie or Vertigo, &c. Mixe either two or more of these above said in ye patiens drinke.
- [5] For diseases of ye Bladder. Giue ye partie to drinke (: if it be an Inflammation & heate of Urine:) emulcions made with barlie, huskt almonds, and ye 4 great cold seeds, if his drinke hath beene strong before; but if small drinke and Water, giue him old Maligo & Canarie, such to drinke Warme either by it selfe, or mixt with Water: And applie to the region of his bladder, a poltis made with barlie meale, and ye rootes or leaves of Aaron: make Injections of ye decoction of Hypericon, ye bark of a young Oake (: the Outward black skinn being taken off:) and linnseede: and by Gods grace he shall finde present ease and cure with continuance.
- [6] For ye stopping of ye Urine, or ye Stone. Give ye partie to drinke of ye decoction of maiden hayre, fennell rootes, and parsly rootes. Lett him drinke great quantitie. But before let him drinke 2 or 3 Ounces of ye Oyle of Allmonds newly extracted, or more: Or let him swallow a quarter of a pound of new butter made into round bullets, and cast into faire Water to harden them.
- [7] For y^e Blooddie Flix: Purge first with Rhubarbe torrified; and give the partie to drinke twice a day a pinte of this caudle following:

Take a dragme of ye best Bole-Armoniak, a dragme of Santalum rubrum, a dragme of Sangvis draconis; and a dragme of ye best terra Sigillata of a yellow colour seal'd with a Castle: Make these into fine powder, and with a quart of red stiptick Wine, the yolks of halfe a dozen eggs, & a quantitie of Sugar, make a Caudle, boyling the powder in a pipkin with the Wine; then adding ye yolks of ye eggs beaten, and lastly ye Sugar. If his gutts haue bene fretted, give him ye Injection for ye bladder before mentioned, in a glister; and if you please you may adde to it the powders.

- [8] For the yellow Jaundise or Jaunders. Boyle a quart of sweet milke, dissolve therein as much bay-salt, or fine Sal-peter, as shall make it brackish in taste: and putting Saffron in a fine linnen clout, rubb it into ye Milke, untill ye Milke be very yellow; and giue it ye patient to drinke.
- [9] For paines in ye Brest or Limmes: Weare a Wilde Catts skin on ye place grieved.

[10] For a broken bone, or a Joynt dislocated, to knit them: Take ye barke of Elme, or Witch-hazzle; cutt away the Outward part, & cutt ye Inward redd barke small, and boyle it in Water, till it be thick that it Will rope: pound it very well, and lay of it hott, barke and all upon ye Bone or Joynt, and tye it on: or with ye Mussilage of it, and bole Armeniack make a playster and lay it on.

[11] My Black powder against ye plague, small pox: purples, all sorts of feavers; Poyson; either by Way of prevention, or after Infection. In the Moneth of March take Toades, as many as you will, alive; putt them into an Earthen pott, so yt it be halfe full; Cover it with a broad tyle or Iron plate; then overwhelme the pott, so yt ye bottome may be uppermost: putt charcoales round about it and over it, and in the open avre, not in an house, sett it on fire and lett it burne out and extinguish of it selfe: When it is cold, take out the toades; and in an Iron-morter pound them very well, and searce them: then in a Crucible calcine them so againe: pound & searce them againe. The first time, they will be a browne powder, the next time black. Of this you may give a dragme in a Vehiculum (or drinke) Inwardly in any Infection taken; and let them sweat upon it in their bedds: but lett them not cover their heads; especially in the Small pox. For prevention, halfe a dragme will suffice: moderate the dose according to ye strength of the partie; for I have sett downe ye greatest that is needfull. There is no danger in it. Let them neither eate nor drinke during their sweat, except now and then a spoonefull of Warme posset-drinke to wash their mouthes. keepe Warme and close, (for a child of 5 yeares, 10 graynes is enough in infection, for prevention 4 or 5 graynes.) till they be perfectly well; and eate but litle; and that according to rules of physicke.

The same powder is used playster wise with Vineger for a gangrene, or bite of anie Venemous beast. taking it likewise Inwardly: it is used likewise for all Cankers, Fistulas & old Ulcers & kings Evill, strewing it upon the sore, and keeping them cleane

[12] An other for old Soares. Take S^t Johns Wort, pound it small, and mingle it with as much quicklime: powre on it raine Water, that may cover it, six fingers deepe in a broad earthen Vessell: putt it to y^e sunne, and stirre it well once every day for a Moneth: then filter and reserve the Water for your use. Wash y^e Soares with it; it cureth Wonderfully.

[13] For Burning with Gunn powder or otherwise. Take ye Inner green Rine of Elder, in latine Sambucus, Sempervive, and Mosse

that groweth on an old thackt howse top, of each alike; boyle them in stale [lotium], and sallet oyle, so much as may cover them 4 fingers: Let all the [lotium] boyle cleane away, & straine it very well; putt new herbes and [lotium] as before, boyle that likewise away, and straine it as before. Then to that oyle adde barrowes grease untill it come to be an Oyntment, with which anoynt a paper, and lay it to ye burning anoynting the place also with a feather.

- [14] For Soare Brests Take yolkes of eggs and honie alike, beat them till they be very thinn: then with wheat flower beat them, till it be as thick as hony: spread it upon flax, and lay it upon the Breast, defending the nibble with a plate of lead as bigg as an halfe crowne, and an hole in it so bigg as that ye nible may come out. renewe it every 12 houres: and this will breake and coole the Brest. Where it breakes, tent it with a salve made of rosin, wax & terpentine alike quantitie
- [15] For Breaking of any Biles or great Swellings. If that poltis next above for the sore Brest doe not breake it, pound fox-glove, and lay it to it, and that will; then tent it, as for the sore Brest.
- [16] For a greene Wound. Take salve of Clownes Wort, or Clownes all-heall prescribed in Gerrits Herball; or the Oyle of Hypericon and Ballsam.
- [17] For the King's evill. Take 2 Toades & let them fast 2 or 3 dayes that they may spewe out their Earth, then boyle them in a pint of Oyle in a newe pipkin covered so long, till they be brought to a black Coale broken in peeces. presse out the Oyle, from the said Toades, reserve a 4th part, to the other three parts add halfe a pound of yellow wax, shavd small. let the wax melt in the Oyle in weh dippe linnen cloathes, that they may be well covered cerecloathes. with the 4th part of the Oyle left, annoynt all the places infected, & then strewe of my black powder of Toades (mentioned before for an Antidot agaynst the Plague) upon the sores or swellings, & then put on of ye cerecloath.

dresse the running sores once everie 24 howres, but it will serve to dresse the swellings once in 4 dayes. Everie 4th day at furthest give of ye said black powder to the partie & let them swet upon it. you may proportion the dos from 5 graynes to a dragme according to the strength & constitution of ye partie. if the partie be strong, it is the better that they swet everie day or everie second day.

By this Course ther is no doubt of the cure by Gods assistance.

Cautions in Phisick. 1 That you doe not let Blood, but in a pleurisie or Contusion, and that necessitated.

2 yt in ye beginning of all Feavers, you fast 2 or 3 dayes from meate and drinke, except ye last day, and that so litle, as onely to sustaine Nature; and afterward you come to your dyet by degrees.

3 yt you purge to follow Nature, and not to contrarie her: as if the partie Vomit, you purge by vomit; if the partie be loose, you purge downwards: if the partie bleed at ye nose, you draw blood.

4 y^t in all purges you administer in long diseases, or to weake persons, you mixe Cordials, as Confectio Alchermes, etc. And y^t you purge with simples and not compounds, except the disease be mixt.

The best purgers: Rhubarbe, or rather ye tincture of it for Choller.

Jallop for Watrie humors.

Agarick for flegme

Extract of Scammonie, or black Hellebor, for melancholie.

Pine de Inde halfe a Kernell for mixt humors.

Crocus Metallorum well prepared for mixt humors,

Spurge seede for ye head.

The Best Sudorificks being simples: Snake roote:

Contra yerva.

The best gumms for drawing Tackamahacka;

Caranna, Kereman; Burgundie pitch:

These may be used simple or mixt for old aches & paines.

Nota benè. No man can with a good Conscience take a fee or a reward before ye partie receive benefit apparent: and then he is not to demand any thing, but what God shall putt into the heart of the partie to give him. And he is not to refuse any thing, that shall be so given him, for it commes from God.

A man is not to neglect that partie, to whom he hath once administred, but to visit him at least once a day, and to medle with no more, then he can well attend. In so doeing he shall discharge a good Conscience before God & Man.

These receipts are all experimented

LONDON May 6th 1643.

Governor Winthrop had been thirteen years in this country, and was fifty-six years of age, when this paper was sent out to him. It is remarkable that this is the very year in which Cotton Mather tells us his health began to fail. "While he was yet seven years off of that which we call the grand Climacterical, he felt the approaches of his Dissolution; and finding he could say,—

'Non Habitus, non ipse Color, non Gressus Euntis, Non Species Eadem, quæ fuit ante, manet,'—

He then wrote this account of himself, Age now comes upon me, and Infirmities therewithal, which makes me apprehend, that the time of my departure out of this World is not far off. But at last, when that Year came, he took a Cold, which turned into a Feaver, whereof he lay Sick about a Month;" "and fell asleep on March 26, 1649." The biographer — whose leading merit is not, I believe, considered strict accuracy — could not resist the pleasing effect of making him die in the year of his grand climacteric; whereas he would not have begun his sixty-third year for nearly three months.

It seems not unlikely that this collection of recipes was sent to Governor Winthrop in consequence of a direct application to his friend Dr. Stafford for a list of remedies useful in common diseases. A paper so carefully drawn up would hardly be volunteered by a London physician to a person who had been long in a distant land, and of whose wants he would know little, unless he had been asked for it.

It was said of Governor Winthrop in his last illness, by "the venerable Cotton" (not Mather), that, among his other merits, he has been "Help for our Bodies by Physick." It may be conjectured that the Governor wrote to Dr. Stafford, that he was in the habit of prescribing among his neighbors: otherwise the London physician would hardly have laid down those professional rules which are found at the end of the paper, under the head "Nota bene."*

^{*} I have assumed that this paper was written for Governor Winthrop, the father, and not for his son, the Governor of Connecticut; there being no positive evidence on this point.

Who was this physician? The singular autograph, of which a fac-simile is given above, is read, by those who are more skilled than myself in deciphering old manuscript, Ed: Stafford. All that relates to the writer, so far as my present means of information extend, must be gathered from this document.

The manuscript consists of three sheets of coarse paper, about six by seven inches in size. A little more than eight pages and a half are written over; and it is inscribed on the back, "For my worthy friend Mr Wintrop." A different and probably later hand has also written on the back, "Receipts to cure various Disorders." The seventh page is not in the same handwriting as the rest. The margins are ruled as if with a lead pencil. Lead pencils are said not to have been in use so far back as the reign of Queen Elizabeth; that is, forty years before this date.* The handwriting, with the exception of the seventh page, is very neat, small, but perfectly legible. The punctuation is very carefully attended to; the comma, semicolon, and colon being employed with discrimination. The spelling, as was to be expected, is not very well fixed; the same word being differently spelled in different places. Yet the writer meant to be exact; and, in one instance, takes the trouble to strike out "breast," and re-write it "Brest." Some very curious archaisms or vulgarisms occur, - as "Flix" instead of "Flux," and "Jaunders" for "Jaundise;" the reader being allowed to choose between these two last. The technical names are used as by a person familiar with them. The brief ethical rules at the end of the paper are in the best spirit, and expressed with dignity. It is evident that "Ed: Stafford" was a man of culture, and well trained in the knowledge of his time, such as it was.

What was the condition of medical knowledge at that time? We can get some light upon this by recalling the

^{*} New Am. Cyc., art. "Graphite."

names of a few authors who were publishing at about this date. Ten years before this paper was written, Thomas Johnson had given to the English world his new edition of that very curious and interesting work, "Gerard's Herball." This is the only authority which is cited by Dr. Stafford; who spells the name "Gerrit," but seems to have been familiar with the book. It is a great collection of pictures and descriptions of medicinal plants, of remarkable merit, notwith standing the errors and wild fancies of the time which it contains. Americans, however, can hardly forgive the author for saying that Indian corn is "more convenient for swine than for men." Probably this treasure-house of simples was a chief reliance of Dr. Stafford for information concerning those vegetable remedies to which he mainly trusted.

In the same year (1643) in which this manuscript was written, Schenck published his vast work, "Observationes Rariores," in which all the wisdom and folly of the preceding centuries was represented; a pudding-stone in which the matrix of lie is as hard as the pebble of truth. The observations and speculations of Van Helmont made their appearance in various treatises, from the year 1621, until they were printed collectively, as the "Ortus Medicinæ," in 1648. Sir Kenelm Digby's "Discourse concerning the Cure of Wounds by the Sympathetic Powder," - the Homeopathic folly of its time, - was given to the credulous world in 1644. Two years later, Riverius, professor of medicine at Montpellier, dedicated his book of signal cures to Vautier, late physician of Maria de' Medici; in which work the astrological sign for Jupiter may be seen alternating with the R for recipe, in which it has since been decently merged. And, in this same year (1646), Sir Thomas Browne sent forth his work on "Vulgar Errors;" in spite of which, ten years later (1656), Schröder reproduced the fantastic doctrine of signatures, with infinite other fancies, in his "Pharmacopæia." In 1661, Robert Lovell, Oxoniensis, Φιλοθεολογιατρουομος, excreted his "Panzoölogicomineralogia," in which all the nonsense that had ever been uttered about animals and minerals was brought into portable shape by this polysyllabic scavenger. In the mean time, Nich. Culpeper, the quack, who thought very justly that he was as good as any of them,—"Nich. Culpeper, gent., student in physick and astrology," as he calls himself in his title-page,—was composing variations to the London Pharmacopæia in terms like these:—

"Colledg. Take of Hog's grease washed in juice of sage a pound, quicksilver strained through leather killed with spittle," etc. etc. etc.

"Culpeper. A learned art to spoil people, hundreds are bound to curse such ointments, 'tis not enough for a man to be plagued with the —, but he must be worse plagued with preposterous medicines."

The charlatan saw the absurdities of the "Colledg," and made use of them for his own glory and profit. Which was the greater quack of the two parties, an impartial posterity might find it difficult to decide.

But the dawn of a new day in English medical practice was just showing itself. In 1666, Sydenham published his first treatise. He was a man of observation and good sense, rather than of book-learning; and, of course, threw all the learned fools of his time into a spasm of hysteric horror and apprehension by his use of these two unpopular qualities. Dr. Stafford—who was young enough to have a very keen eyesight, as may be seen in the minute dots over his i's, j's, and j's—may have lived long enough to learn from Sydenham how to treat small-pox by better means than toad-powder and sweating; but the worthy Governor was born too early, and died under the ancient dispensation.

The muck-heap of the old Pharmacopæia, fit only to be scattered like compost as it fermented in its own immundicities, hardly sweetened itself in the whole course of the following century. The reform which Sydenham began went on slowly. It was late in the seventeenth century, that the

great philosopher, Robert Boyle, published his "Medicinal Experiments;" in which figure as remedies, -" the sole of an old shooe, worn by some man that walks much;" "the Bone of the Thigh of a hang'd man;" the excrements of horses, sheep. dogs, and similar abominations. The most inconceivable farragos kept their place in legitimate practice much later than this. Huxham, who died in 1768, left prescriptions containing more than four hundred ingredients; and when Heberden, who was living so late as 1801, proposed the dismission of the absurd old mess called "Theriaca Andromachi" from the British Pharmacopæia, his proposition was carried by a vote of only fourteen, against thirteen who were in favor of retaining it. The more loathsome articles gradually dropped out of use: but James's "New Dispensatory" (1764) retains woodlice, sow-bugs, and earth-worms; and Cullen (1789) had to attack Vogel for allowing burnt toads and swallow-chicks to remain upon his list of remedies.

Dr. Stafford's practical directions to so considerable a person as Governor Winthrop, in a strange land where he would be exposed to unknown causes of disease, might be taken as a fair sample of the better sort of practice of the time. There is no parade of polypharmacy; no display of learned names for aches and ailments. It was written for the special use of a friend, and evidently with care and forethought.

What were the diseases and injuries the physician expected the Governor would have to deal with? Plague, small-pox, scurvy; all sorts of fevers, poisons; madness, epilepsy, hysteria, lethargy, vertigo; dysentery, jaundice; pains, rheumatic or other; affections of the urinary organs; pleurisies; watery humors, or dropsies; phlegm, or catarrhal affections,—such are the inward complaints for which he prescribes. Fractures, dislocations, wounds, bites of venomous creatures, boils, ulcers, gangrene, scrofula, burning with gunpowder, &c., are the external maladies.

I proceed to make some brief notes on the medicinal substances he recommends, referring each remedy to the paragraphs in which it is mentioned.

- (1, 4, 5, 7, 12, 16) Hypericum, St. John's Wort. Gerard commends it for wounds, burns, stone in the bladder; and says, it "stoppeth the laske" (diarrhœa). "I am accustomed to make a compound oyle hereof; the making of which ye shall receive at my hands, because that I know in the world there is not a better, no, not natural balsam (Balsam of Gilead) itself." So says Gerard. It is aromatic and astringent, and is still used as a domestic remedy.
- (1, 4) Spurge, Cataputia minor?—The name "spurge" has been applied to various plants (James's Dispensatory). Gerard figures no less than twenty-three varieties. Sir Thomas Browne speaks of the old wives' fancy about spurge; that its leaves, "being pulled up or downward respectively, perform their operations by purge or vomit." The same notion prevails among some of our country people respecting thoroughwort,— Eupatorium perfoliatum. Professor Tuckerman is unable to determine to which of several kinds of spurge, mentioned in Josselyn's "Voyages," the "spurgetime" spoken of in "New England's Rarities" is to be referred.
- (2, 4) BLACK HELLEBORE, Helleborus niger. Hellebore was proverbially famous in ancient times for the cure of madness. The variety used was probably the Helleborus Orientalis. Black hellebore is still retained in the United-States Pharmacopæia; and its extract, as Mr. Metcalf informs me, is often prescribed. Drastic cathartic.
- (2, 4) CINQUEFOIL, Pentaphyllon; Potentilla.—Vulnerary; useful in many diseases, according to Gerard and Schröder. An astringent not now in use.
- (3, 4) Bryony, Bryonia. A drastic cathartic, not now employed, unless the homoeopathists can be said to make use of it.

- (5) The FOUR GREAT COLD SEEDS are those of the cucumber (cucumeris), the gourd (cucurbitæ), the water-melon (citrulli), and the melon (melonum). Schröder. Wood and Bache mention pumpkin in the place of water-melon.
- (5) AARON is doubtless meant for Aron, Arum, Cockow or Cuckow pint, of Gerard; Arum maculatum (Wake Robin); Cuckow pint (Pereira). Acrid stimulant. "Beares, after they have lien in their dens forty days without any manner of sustenance, but what they get with licking and sucking their owne feet, do as soone as they come forth, eate the herbe Cuckow pint, through the windie nature whereof the hungry gut is opened, and made fit againe to receive sustenance."—Gerard, p. 835.
 - (5, 7) Oak Bark is still in common use as an astringent.
- (6) Maidenhair, Adiantum, is principally known as the basis of the Sirop de capillaire. Bitterish aromatic.
- (6) Fennel, Fæniculum, is a well-known aromatic and carminative, retained in our Pharmacopæia. Dr. James Jackson has favored me with the following note respecting this remedy:—

"The oil (of fennel) is a constituent part of the fennel balsam formerly used by Dr. Holyoke and everybody else in Salem. I think that Dr. Holyoke derived the receipt from Dr. Greene, or some other doctor, of Malden. It was a solution of potass, partially carbonated and prepared in a peculiar way, and seasoned with the oil of fennel. No doubt, the formula can be found in Salem. It was much used as a carminative, mostly for children. If the doctor omitted to prescribe it, the old women would ask if it might not be given, — in doses of five or ten drops, I believe; and the doctor would usually reply, 'Ay, yes, yes.'"

Dr. Jackson's reference to Salem reminds me of a curious fact, which came under my notice; illustrating the tenacity with which old names and practices are retained in that ancient and conservative settlement. I found, accidentally, an ointment to be in use there, called by the singular name

nutritum. The word was not in Dunglison's "Medical Dictionary;" it was not in Bruno's "Castelli," where, if in any old book, it might have been looked for. I supposed it to be a popular corruption of some scientific term, but could not determine what. I have, however, since met with the word in two places, - Boyle's curious work, before referred to (third edition, 1712, p. 61); and Dr. Slare's "Vindication of Sugar," "dedicated to the Ladies," 1714. "There is an ointment," he says, "called unquentum nutritum, that has two sorts of lead, and no other herb mixed with it [sic], of excellent use for sores" (p. 46). Mr. Webb, a much respected apothecary of Salem, still prepares a lead ointment similar to that mentioned by Boyle and by Dr. Slare, retaining the obsolete name nutritum; of which no person out of Salem, with whom I have spoken of the matter, has ever heard, and which has escaped even the omnivorous pages of Dunglison. It came down through "old Master" Holyoke.

- (6) Parsley-root, *Petroselinum*, keeps its place in the "secondary" list of the United-States Pharmacopæia. It is still used in the same class of cases for which it is prescribed by Dr. Stafford. Dr. Jackson tells me he has a patient who habitually employs parsley with good effect,—a hot infusion of the *leaves*, however; not the root.
- (6) OIL OF ALMONDS, Oleum amygdalæ (U.S. Pharm.), is often used as a demulcent.
- (6) Butter has been given of late as a substitute for codliver oil. It was successfully administered, as is related by Riverius, in a case of bilious colic (Obs. Med. et Cur. Insignes, Cent. ii., Obs. lxi.).
- (7) Rhubarb. Mr. Metcalf tells me that it has been prescribed roasted, within a few years, by a Boston physician. Dr. Bigelow says (Sequel to the Pharmacopæia, p. 316) that "the popular practice of toasting rhubarb only diminishes its activity, without adding to it any valuable property." The intention was to render its action milder.

- (7, 10) Armenian bole, Terra sigillata. These argillaceous earths are made great account of, as internal astringent remedies, in the old books, where all their distinctions are described at length. A short account of them may be found in the Appendix to Wood and Bache's "Dispensatory." Armenian bole is used in making tooth-powder.
- (7) Santalum Rubrum, Red Sanders; Santalum (U.S. Pharm.), is used only for its coloring properties.
- (7) Sanguis Draconis, *Dragon's Blood*, is sometimes used to color plasters, but is no longer given internally.
- (8) Salt, Sodii chloridum (U.S. Pharm.), is rather a food than a medicine; but is classed as a stimulant tonic, and, in large doses, as a purgative. Bay salt differs from common salt chiefly in the size and degree of compactness of the grains.
- (8) SALTPETRE, *Potassæ nitras* (U.S. Pharm.), is refrigerant, diaphoretic, diuretic, aperient.
- (8) SAFFRON, Crocus (U. S. Pharm.), is principally used to give color and flavor to tinctures. Old women hold it in great esteem as a remedy. "Safforn tea" (the word pronounced as old Josselyn spells it) is their never-failing prescription to bring out the eruption in measles and scarlet fever. The reason of its being prescribed in "Yellow Jaundise or Jaunders" must be looked for in the doctrine of signatures. Its yellow color was supposed to be the Creator's mark of its fitness in diseases which involved the yellow bile.
- (9) Wild-cat's Skin. Robert Lovell, of the "Panzoölogicomineralogia," says of the cat, "The skin is woorn to warm the stomach, and help contractions of the joynts." For his authority, he cites the mythical personage, called, in his list of authors cited, "Obscurus." I suspect that Dr. Stafford may have thought that wild-cats would be more easily obtained in the wilderness than the domestic animal, and therefore have mentioned this variety of Catus.

"A black wolf's skin is worth a beaver-skin among the Indians, being highly esteemed for helping old aches in old people, worn as a coat;" (Josselyn; New England's Rarities Discovered, p. 16.) "One Edw. Andrews, being foxt [drunk], and falling backward cross a thought [thwart], in a shallop, or fisher-boat; and, taking cold upon it, grew crooked, lame, and full of pain, — was cured, lying one winter upon bears' skins newly flead off, with some upon him, so that he sweat every night" (Ibid., p. 14). The skin of a recently killed lamb has been in use, of late years, for rheumatism (Mr. Metcalf). Sir Walter Scott, it may be remembered, was subjected, when a child, to a prescription of this kind.* The "pork-jacket" (an application of fresh pork to the chest) was used, with seeming good effect, in the case of one of my neighbors, within a few months.

- (10) ELM, *Ulmus*.—"The leaves of Elme glew and heale up greene wounds; so doth the barke, wrapped and swaddled about the wound like a band" (Gerard, p. 1482). U. S. Pharm.; and in common use internally as a demulcent, externally, in cataplasms.
- (10) WITCH-HAZEL, Ulmus folio latissimo scabro (Gerard), Ulmus montana (Wright, cited in Worcester's Dictionary). Like the above.
- (11, 17) TOADS. These inelegant animals have long enjoyed a reputation for various qualities, which they deserve more or less well. That they are "ugly," as Shakspeare says, none will dispute. That they are "venomous," may, perhaps, be questioned. That they wear "a precious jewel" in their heads must be confessed a fiction.

The belief in the poisonous quality of the toad is of long standing, and still exists among the ignorant. Boccaccio's story of "Pasquino and Simona" may not be remembered by all my readers. The first, who was the lover, seated with

^{*} Autobiography in Lockhart's Life, vol. i. p. 45, Ticknor & Fields's edition.

his lady-love near a bush of sage, plucks a leaf, and rubs his teeth with it. Presently he swells up, and dies. Simona is accused of poisoning him. Wishing to show how events had occurred, she also takes a leaf of sage from the same bush, and rubs her teeth with it. She, too, drops down dead. Great amazement of all present. The sage is cut up by the roots. Under it is found "a monstrous overgrown toad, with whose breath it (the sage) was judged to be infected."

That the toad has some unpleasant personal quality, I became convinced by the following observation: A small and inexperienced puppy undertook to amuse himself with a perfectly civil toad by pushing him about with his nose, and handling him with his paws. What the toad did, I never knew; but all at once the little dog withdrew, with marks of the most intense disgust, and was immediately attacked with free salivation, continuing for some time, and of extraordinary amount, such as I have never seen any thing like in beast or man. It was remarked that he never meddled with a toad again so long as he lived.

Rana usta, burned frog, is mentioned by Actius, in the fifth century, as good to stay bleeding. Burnt toad is commended by philopolysyllabic Lovell; and held its reputation, as we have seen, until within less than a hundred years. It seems to have been the favorite remedy of good Dr. Stafford. "My black powder" is prescribed both inwardly and outwardly in the gravest diseases. It made the patients sweat, as well it might: whether it turned their stomachs or not, is not mentioned.

The principle on which the toad and other hateful objects were applied to medicinal uses may have been partly the association of contrast, like that which placed the jewel in the reptile's ugly head,—the pleasing antithesis of detecting a hidden virtue under a forbidding aspect. Partly it may have been, that disease was personified as an evil nature, to be expelled from the body by odious things, such as the demon

of illness might be supposed to dread, and fly from. The morbid instinct of hostility to the natural processes of disease showed itself, in early times, in horrible prescriptions, like those which Pliny mentions,—the blood of gladiators taken from their fresh-gaping wounds; and, if possible, even more hideous spoils of humanity. In succeeding centuries, it fell off to objects simply disgusting,—like burnt toads, and the infinitely more loathsome matters which fill the old books. The next stage of civilization contented itself with poisons. The abuse of these substances was gradually yielding to the advance of the two half-sisters, Science and Common Sense, when the incredible fiction of homoeopathy came in, and revived, at least in name and in theory, multitudes of the exploded barbarisms of the preceding epochs.

- (12) QUICK-LIME.—Lime-water, Liquor calcis (U.S. Pharm.), is still prescribed as a wash in cases like that for which it is here recommended.
- (13) ELDER, Sambucus (U.S. Pharm., secondary). The flowers, the berries, and the bark have all been used medicinally. No remedy has been so popular, perhaps, with mankind as elder. It is mentioned by Hippocrates four hundred years before Christ. I have a flourishing advertisement of "Sambuci Wine" before me, taken from the "Boston Traveller" of Feb. 1, 1862. The boiling "oil of elder" was the famous cure for gunshot wounds in Ambrose Paré's time. The American variety differs from the European; and both, Dr. Bigelow thinks, are of little use.
- (13) Sempervive, Everlasting. "Probably cowleek," says Dr. Bigelow; "of doubtful value." "Everlasting" is still used in domestic practice; but Mr. Metcalf has never seen it prescribed by a regular physician. Employed as a cooling application to burns, stings, &c. (Wood and Bache).
- (13) Moss, Muscus. Gerard and Johnson figure fourteen kinds, including muscus ex cranio humano; but I cannot determine which is intended by Dr. Stafford.

LOTIUM. — Dr. Stafford employs the vernacular monosyllable. Schröder (1656) devotes four columns to its medicinal uses and preparations. It does not appear in James's "Dispensatory" (1764); but I am informed that it is still employed as a popular remedy among the ignorant.

- (14) RESIN, WAX, TURPENTINE. These substances are combined in the Compound Resin Cerate of the United-States Pharmacopæia.
- (15) FOXGLOVE, Digitalis (U.S. Pharm.).—Used internally; or, if externally, to act as a diuretic. Bouillaud calls it the "opium of the heart," from its action on that organ. It is a powerful but dangerous sedative.
- (16) Clown's Wort, Clown's All-Heal, Panax coloni (Gerard), Stachys palustris. Gerard gave it its English name in consequence of a wonderful "cure" he wrought on a poor man, who, "in mowing of Peason, did cut his leg with a sithe." He made a "pultesse" of the herb, stamped with hog's grease, which "did, as it were, glew or soder the lips of the wound together, and heale it according to the first intention, as we terme it; that is, without drawing or bringing the wound to suppuration or matter: which was fully performed in seuen dayes, that would have required forty dayes with balsam it selfe." "Since which time, my selfe have cured many grievous wounds, and some mortall, with the same herbe."
- (16) Balsam, Balsam of Gilead, Amyridis Gileadensis resina (Edin. Pharm.). Mentioned by Wood and Bache because retained by the Edinburgh College. Has the virtues of other terebinthinates. Was once in high repute, but is now disused.
 - (17) WAX, OIL. In common use in cerates, &c.

Remedies mentioned in the General Directions.

Confection Alchermes. — A confection made with kermes, or coccus ilicis, an insect once thought to have special medical virtues; now used only as a dye.

Jalap; Jalapa (U.S. Pharm.). — Cathartic; in common use.

AGARIC, Boletus igniarius (Ed.). — "Ranked among the Phlegmagogue Purgatives" (James). Mr. Metcalf has seen it prescribed by a German physician; but it is not in use as an internal remedy among us. "That useful purging excrense (sic) agarick" (Josselyn, Tuckerman's edition). As "spunk," it has been employed for moxæ. The Indians use it in this way, according to Josselyn (p. 52). I am not aware that they have ever disputed the claim of the Japanese to the credit of contriving this remedial agent.

EXTRACT OF SCAMMONY, Scammonium (U.S. Pharm.).—Scammony is an energetic cathartic, still used, but mostly in combination with other drugs.

PINE DE INDE. — What particular pine is referred to, I have not discovered.

CROCUS METALLORUM, Sulphuretted Oxide of Antimony.—Rarely employed (Dunglison). Used by the Edinburgh College in preparing tartar-emetic (Wood and Bache). Mr. Metcalf has known it to be used for making antimonial wine.

SNAKE-ROOT, Aristolochia serpentaria; Serpentaria (U.S. Pharm.). — A stimulant tonic, acting also as a diaphoretic and diuretic, in frequent use. Dr. Jackson says, "Snakeroot, Serpentaria, has been much used in my day as a grateful stimulant, especially to 'bring out the measles;' and, in the late stages of fever, I have used it."

CONTRAYERVA (U.S. Pharm., secondary), Dorstenia contrayerva (Ibid.).—Stimulant, tonic, and diaphoretic; very seldom used in this country (Wood and Bache). Mr. Metcalf has known it prescribed within a few years.

TACAMAHACA. — A resinous substance, supposed to be derived from the *Fagara octandra* of Linnæus. Formerly highly esteemed as an internal remedy; now little used, and only for ointments and plasters (Wood and Bache). Mr.

Tuckerman has, in one of his notes to Josselyn, "Larix Americana, Michx. (Larch; taccamahac, Cutler; tamarack; hackmatack"). The Calophyllum inophyllum is said to yield tacamaque (Rees's Cyc.).

CARANNA. — This resin resembles tacamahaca; but, according to Schröder, is a little more fragrant, glistening, liquid, and heavy. It was so much esteemed in medicine, that there was a proverb, "Whatever the tacamahaca has not cured, the caranna will" (Rees's Cyc., art. "Caranna"). The two substances are treated as identical in Dunglison's "Medical Dictionary."

KEREMAN. — I can make nothing of this, unless it be mastic, or some such substance, which, coming from *Kerman* in Persia, took the name of that place.

BURGUNDY PITCH, Pix abietis (U.S. Pharm.). — In common use for plasters.

With the exception of the cathartics, most of the internal remedies are simply insignificant,—such as old women prescribe without fear and without reproach. Not a single opiate; but one metallic preparation, and that merely enumerated in the list at the end; not one of our so-called specifics. Montaigne was of opinion, that the chief work of physicians was to "purge the belly;" and, truly, that operation and bleeding formed a large part of ancient practice. We must not forget the sudorifics, however, which were used so frequently before the time of Sydenham, under the idea of expelling the materies morbi. The toad-powder, which was expected to procure sweating, was principally animal charcoal, with some saline matters contained in the bones and other parts.

Whatever we may think of Dr. Stafford's practice, it is not certain that his patients would all have done better under the treatment of the present day. Some differences there would certainly be in our favor. We should trust more to moral treatment, in "madness," than to St. John's wort; to diet, rather than to cinquefoil, in epilepsy. We should hope a good deal from opiates in dysentery, and confidently expect to arrest some fevers — those of periodical type — by quinine. But slight cases of disease would commonly get well under his treatment, and severe ones often die under ours. Diseases are like bullet-wounds: much may depend on their treatment, but much more must be referred to the extent of the visible or invisible injury and the part affected. It is a curious commentary on the nature of medical evidence, that the most popular medicine in the history of mankind should be elder, - a plant with hardly any assignable virtues. As for the external remedies, no one of them can claim any special efficacy; and some of them probably did more to irritate than to heal. The magic of "clown's all-heal" and "balsam" has been dispelled by the every-day observation of the kindly union of wounds simply brought together, or dressed with nothing but water.

The general medical directions at the end of the paper are very judicious, and might be followed with profit by the students of our own time. Some of them are of the true Hippocratic stamp, and confirm the idea that Dr. Stafford was a man of good sense and education. He has a just claim to be treated with respect; and, though some of his prescriptions may cause us to smile or shudder, it would be well if a physician of our time, whose prescriptions should be exhumed in the year 2080, were able to stand the examination of posterity as creditably as the very respectable Dr. Stafford, friend and adviser of John Winthrop, the honorable Governor of the Massachusetts Colony.

TO STATE OF THE ST the state of the s the last the same and design the state of the state of